

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Original): A check valve for micro electromechanical structure devices, said check valve being connectable to a system being charged with pressurized fluid and comprising:

- a) a valve body having a fluid inlet conduit and a fluid outlet conduit;
- b) a valve chamber interposed between said fluid inlet and fluid outlet conduit in fluid flow communication, a valve seat being formed between said valve chamber and said fluid outlet conduit;
- c) a fluid bypass channel connecting said fluid inlet conduit and said valve chamber;
- d) and a freely movable valve member being located in said valve chamber, said valve member being displaced into a first valve-open position within said chamber by said pressurized fluid flowing through said bypass channel for charging said system, and upon letdown of pressure upon said system having been charged, said valve member being displaced into contact with said valve seat in a second valve-closing position so as to inhibit fluid flow through said check valve and seal said system.

Claim 2. (Original): A check valve as claimed in Claim 1, wherein said valve is self-sealing responsive to said valve member being moved into contact with said valve seat.

Claim 3. (Original): A check valve as claimed in Claim 1, wherein said valve comprises a permanent component of said system upon pressure letdown thereof in that said valve member is maintained in a sealing relationship with said valve seat.

Claim 4. (Original): A check valve as claimed in Claim 1, wherein said valve member comprises a plug member which is slidable within said valve chamber between said first position in which said bypass channel enables fluid flow communication between said valve chamber and said fluid outlet conduit to facilitate filling said system and said second position in sealing engagement with said valve seat so as to inhibit fluid flow through said check valve.

Claim 5. (Original): A check valve as claimed in Claim 1, wherein said pressurized fluid comprises a supercritical fluid for a hydraulic system.

Claim 6. (Original): A check valve as claimed in Claim 5, wherein said hydraulic system is a component of a heating and cooling or pumping arrangement.

Claims 7-13 (Canceled).